

IN THE CLAIMS:

Amendments to the Claims

Please amend claims 1, 7 and 12 and add the new claims as shown below, and please cancel claim 2 without prejudice or disclaimer of the subject matter thereof.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A semiconductor device comprising:

a substrate;

a semiconductor chip mounted on one surface of said substrate, said semiconductor chip having an integrated circuit and bonding pads formed on a main surface thereof, said main surface of said semiconductor chip having a quadrilateral shape, said bonding pads being disposed along four sides of said main surface of said semiconductor chip;

a plurality of conductors being disposed on said one surface of said substrate to surround said semiconductor chip along the four sides thereof, said plurality of conductors being arranged so as to extend with one respective end thereof in a radial pattern toward said semiconductor chip such that an extension of the one respective end of at least one of said plurality of conductors extends diagonally through a corner of said semiconductor chip;

a plurality of bonding wires electrically connecting said bonding pads with tips of said plurality of conductors, respectively; and

a resin body sealing said semiconductor chip, said plurality of conductors and said plurality of bonding wires;

wherein a pitch between adjacent bonding pads increases in a direction toward four corners defined by the four sides of said main surface of said semiconductor chip;

wherein a largest pitch of the tips of the conductors of two adjacent conductors at the vicinity of each of the four corners of said semiconductor chip is less than twice a smallest pitch with respect to pitches of respective tips of said plurality of conductors surrounding said semiconductor chip; and

wherein the tips of the conductors terminate at a position on said one surface of said substrate so as to surround a periphery of said semiconductor chip with the bonding wires connecting the tips of the conductors with the bonding pads of said semiconductor chip.

Claim 2 (canceled)

3. (original) A semiconductor device according to claim 2, wherein a relationship $(L) < 2(W1) + (W2)$ exists, where (L) is an allowable largest spacing at points of adjacent conductors, $(W1)$ is a smallest pitch of the adjacent conductors and $(W2)$ is a smallest width of the conductors.

4. (original) A semiconductor device according to claim 3, wherein said semiconductor chip is bonded to said substrate by a thermosetting resin.

5. (original) A semiconductor device according to claim 3, wherein said substrate includes an insulating layer formed on said one surface thereof.

6. (original) A semiconductor device according to claim 3, wherein said conductors are formed of a material whose principal component is copper.

7. (currently amended) A semiconductor device comprising:

a substrate;

a semiconductor chip mounted on one surface of said substrate, said semiconductor chip having an integrated circuit and bonding pads formed on a main surface thereof, said main surface of said semiconductor chip having a quadrilateral shape, said bonding pads being disposed along four sides of said main surface of said semiconductor chip;

a plurality of conductors being disposed on said one surface of said substrate to surround said semiconductor chip along the four sides thereof, said conductors being arranged so as to extend with one respective end thereof in a radial pattern toward said semiconductor chip such that an extension of the one respective end of at least one of said plurality of conductors extends diagonally through a corner of said semiconductor chip;

a plurality of bonding wires electrically connecting said bonding pads with tips of said conductors respectively; and

a resin body sealing said semiconductor chip and said plurality of bonding wires;

wherein a pitch between first ones of adjacent bonding pads at each of four corners defined by the four sides of said main surface of said semiconductor chip is wider than a pitch between second ones of adjacent bonding pads which are disposed at other than the four corners and at a relatively central position of each of the four sides;

wherein a largest pitch of the tips of the conductors of two adjacent conductors at the vicinity of each of the four corners of said semiconductor chip is less than twice a smallest pitch with respect to pitches of respective tips of said plurality of conductors surrounding said semiconductor chip; and

wherein the tips of the conductors terminate at a position on said one surface of said substrate so as to surround a periphery of said semiconductor chip with the

bonding wires connecting the tips of the conductors with the bonding pads of said semiconductor chip.

8. (original) A semiconductor device according to claim 7, wherein said semiconductor chip is bonded to said substrate by a thermosetting resin.

9. (original) A semiconductor device according to claim 7, wherein said substrate includes an insulating layer formed on said one surface thereof.

10. (original) A semiconductor device according to claim 9, wherein said conductors are formed on said insulating layer of said substrate.

11. (original) A semiconductor device according to claim 7, wherein said conductors are formed of a material having copper as a principal component thereof.

12. (currently amended) A semiconductor device comprising;
a substrate;
a semiconductor chip mounted on one surface of said substrate, said semiconductor chip having an integrated circuit and bonding pads formed on a main surface thereof, said main surface of said semiconductor chip having a quadrilateral shape, said bonding pads being disposed along four sides of said main surface of said semiconductor chip;

a plurality of conductors being disposed on said one surface of said substrate to surround said semiconductor chip along the four sides thereof, said conductors being arranged so as to extend with one respective end thereof in a radial pattern toward said semiconductor chip such that an extension of the one respective end of at least one of said plurality of conductors extends diagonally through a corner of said semiconductor chip;

a plurality of bonding wires electrically connecting said bonding pads with tips of said conductors respectively; and

a resin body sealing said semiconductor chip and said plurality of bonding wires;

wherein said bonding pads include first adjacent bonding pads disposed at each of four corners defined by the four sides of said main surface of said semiconductor chip and second adjacent bonding pads disposed at areas of the four sides of said semiconductor chip which are farther from the four corners than said first adjacent bonding pads; and

wherein a pitch between said first adjacent bonding pads is wider than a pitch between said second adjacent bonding pads;

wherein a largest pitch of the tips of the conductors of two adjacent conductors at the vicinity of each of the four corners of said semiconductor chip is less than twice a smallest pitch with respect to pitches of respective tips of said plurality of conductors surrounding said semiconductor chip; and

wherein the tips of the conductors terminate at a position on said one surface of said substrate so as to surround a periphery of said semiconductor chip with the bonding wires connecting the tips of the conductors with the bonding pads of said semiconductor chip.

13. (original) A semiconductor device according to claim 12, wherein said semiconductor chip is bonded to said substrate by a thermosetting resin.

14. (original) A semiconductor device according to claim 12, wherein said substrate includes an insulating layer formed on said one surface thereof.

15. (original) A semiconductor device according to claim 14, wherein said conductors are formed on said insulating layer of said substrate.

16. (original) A semiconductor device according to claim 12, wherein said conductors are formed of a material having copper as a principal component thereof.

17. (new) A semiconductor device according to claim 1, wherein said plurality of conductors linearly extend in the radial pattern towards said semiconductor chip.

18. (new) A semiconductor device according to claim 7, wherein said plurality of conductors linearly extend in the radial pattern towards said semiconductor chip.

19. (new) A semiconductor device according to claim 12, wherein said plurality of conductors linearly extend in the radial pattern towards said semiconductor chip.